TN0024449
MTS

Form Approved 1/14/99
OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER:
City of Copperhill WWTP TN0024449

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: City of Copperhill WWTP

Mailing Address: PO Box 640
Copperhill TN 37317

Contact person: Carlton J. Patterson

Title: Operator

Telephone number: 423-496-7023

Facility Address (not P.O. Box): #1 River Camp Rd.
Copperhill TN 37317

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name:

Mailing Address:

Contact person:

Title:

Telephone number:

WPC Permit Section
RECEIVED
DEC 23 2010
TN Division Of Water Pollution Control

Is the applicant the owner or operator (or both) of the treatment works?

X owner X operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

X facility ____ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	TN0024449	PSD	N/A
UIC	N/A	Other	
RCRA	N/A	Other	

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
City of Copperhill, TN	400	Separate	Copperhill, TN
City of McCaysville, GA	1,200	Separate	McCaysville, GA

Total population served: 1,600 est.

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A.5. Indian Country.

a. Is the treatment works located in Indian Country?

____ Yes X No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

____ Yes X No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 0.700 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	.222	.271	.260	mgd
c. Maximum daily flow rate	.599	1.042	.928	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

X Separate sanitary sewer	100 %
____ Combined storm and sanitary sewer	____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? X Yes ____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	1
ii. Discharges of untreated or partially treated effluent	N/A
iii. Combined sewer overflow points	N/A
iv. Constructed emergency overflows (prior to the headworks)	N/A
v. Other _____	N/A

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ____ Yes X No

If yes, provide the following for each surface impoundment:

Location: N/A

Annual average daily volume discharged to surface impoundment(s) N/A mgd

Is discharge ____ continuous or ____ intermittent?

c. Does the treatment works land-apply treated wastewater? ____ Yes X No

If yes, provide the following for each land application site:

Location: N/A

Number of acres: N/A

Annual average daily volume applied to site: N/A Mgd

Is land application ____ continuous or ____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ____ Yes X No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: N/A

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name: N/A

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes X No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):
N/A

Annual daily volume disposed of by this method: N/A

Is disposal through this method _____ continuous or _____ intermittent?

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number 001

b. Location
Copperhill (City or town, if applicable) 37317 (Zip Code)
Polk (County) (State)
35 Deg 59 min 30 sec (Latitude) 84 Deg 23 min 00 sec (Longitude)

c. Distance from shore (if applicable) N/A ft.

d. Depth below surface (if applicable) N/A ft.

e. Average daily flow rate .260 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ____ Yes X No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ____ Yes X No

A.10. Description of Receiving Waters.

a. Name of receiving water Ocoee River

b. Name of watershed (if known) ____

United States Soil Conservation Service 14-digit watershed code (if known): ____

c. Name of State Management/River Basin (if known): ____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): ____

d. Critical low flow of receiving stream (if applicable):
acute N/A cfs chronic N/A cfs

e. Total hardness of receiving stream at critical low flow (if applicable): N/A mg/l of $CaCO_3$

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A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary X Secondary

_____ Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	85 %
Design SS removal	85 %
Design P removal	N/A %
Design N removal	N/A %
Other _____	N/A %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Liquid Chlorine

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes X No

d. Does the treatment plant have post aeration? _____ Yes X No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.6	s.u.			
pH (Maximum)	7.3	s.u.			
Flow Rate	.928	MGD	.260	MGD	365
Temperature (Winter)	16°	°C	12°	°C	260
Temperature (Summer)	21°	°C	19°	°C	260

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	4	mg/l	3	mg/l	156	Standard 507	
	CBOD-5	N/A						
FECAL COLIFORM		N/A						
TOTAL SUSPENDED SOLIDS (TSS)		7	mg/l	3	mg/l	156	Standard 2090	

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
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BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

1000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

N/A

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ___Yes X No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

___Yes X No

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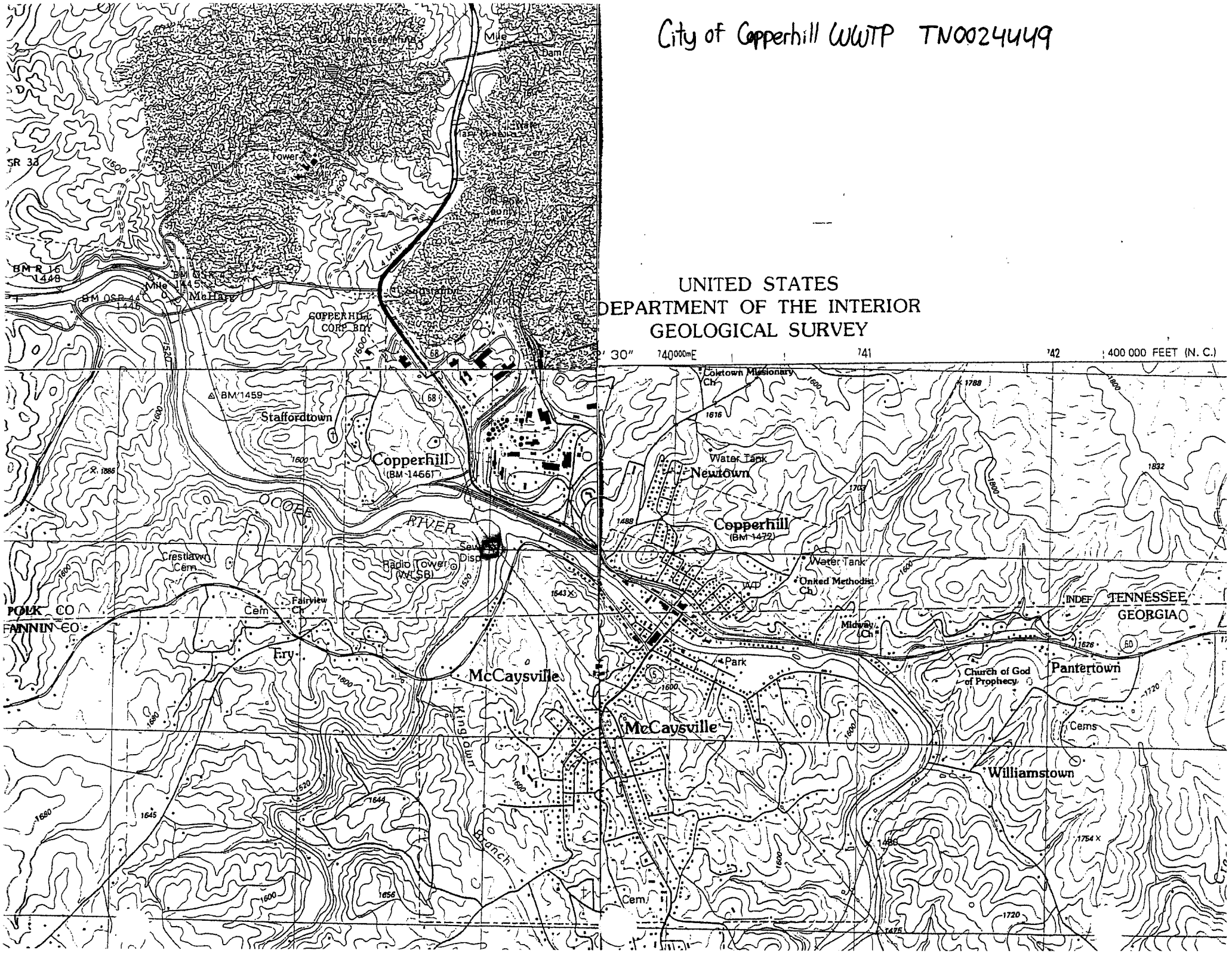
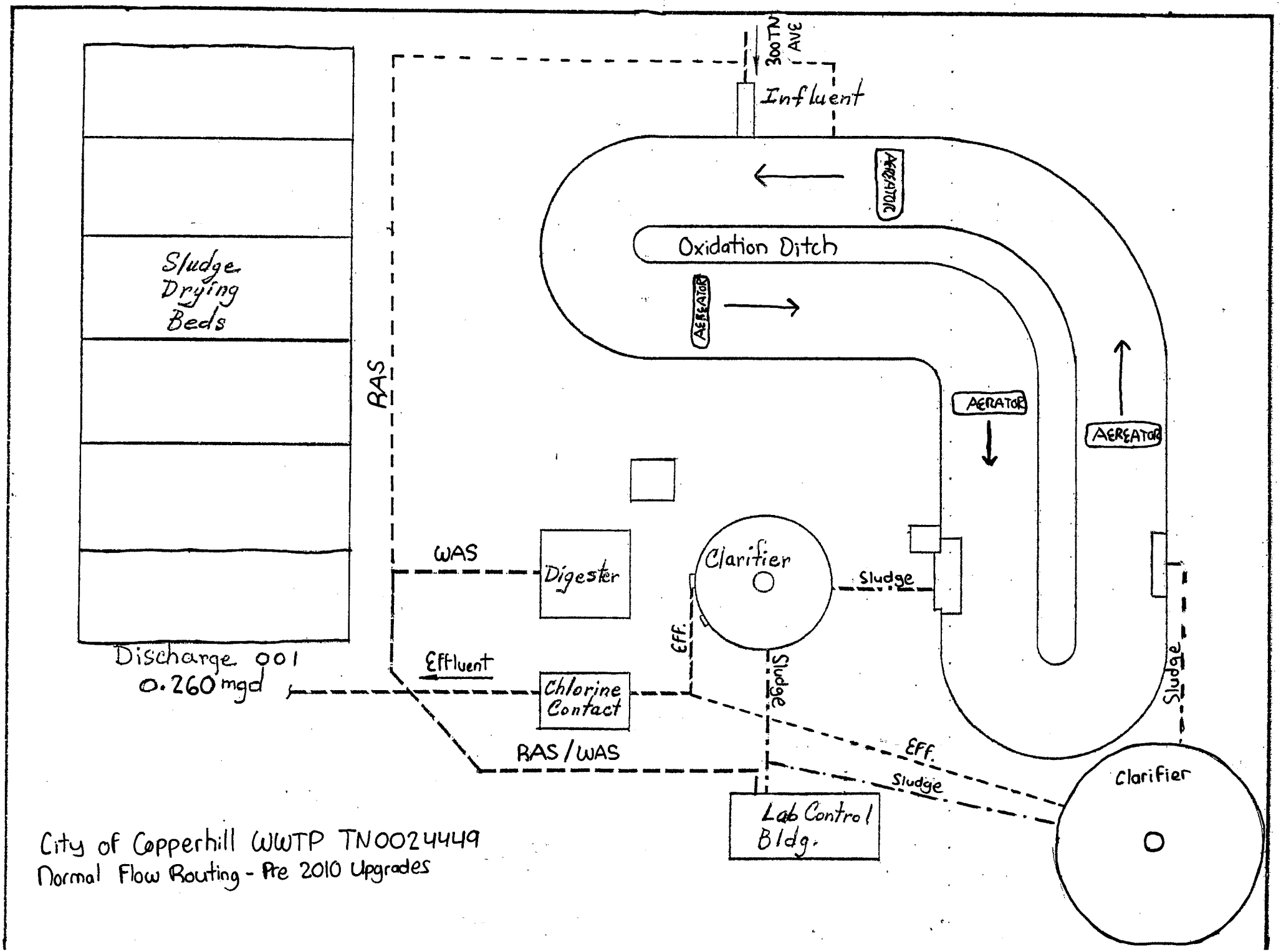
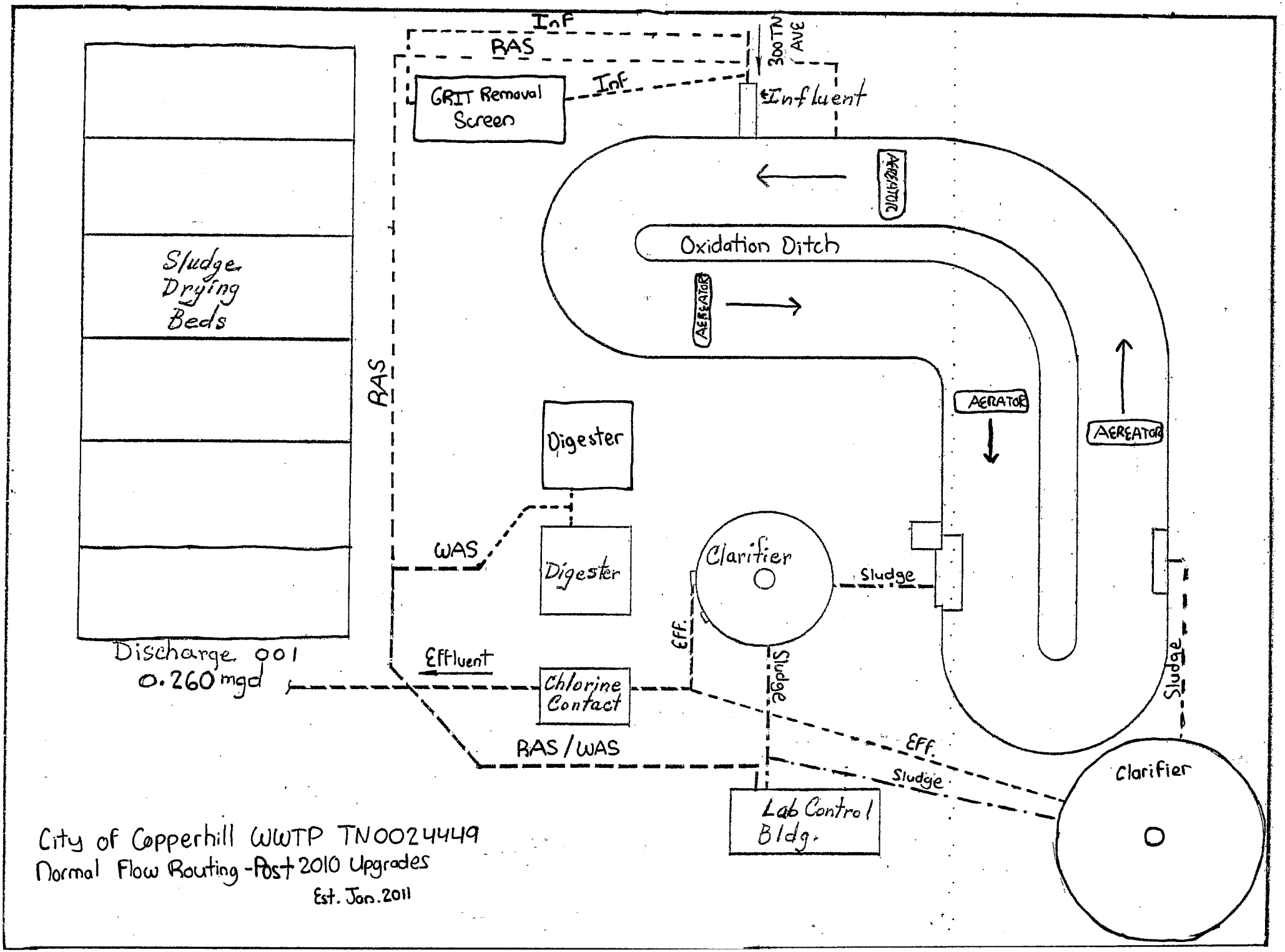



300 TN Ave
Influent
Aeration
Oxidation Ditch
Aerator
Aerator
Aerator
Aerator
Sludge Drying Beds
RAS
WAS
Digester
Clarifier
Sludge
Eff.
Sludge
Effluent
Chlorine Contact
Discharge 001
0.260 mgd
RAS / WAS
Eff.
Sludge
Lab Control Bldg.
Clarifier
Sludge
City of Copperhill WWTP TN0024449
Normal Flow Routing - Pre 2010 Upgrades



City of Copperhill WWTP TN0024449
Normal Flow Routing - Post 2010 Upgrades
Est. Jan. 2011

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).
N/A

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	N/A / /	/ /
– End construction	N/A / /	/ /
– Begin discharge	N/A / /	/ /
– Attain operational level	N/A / /	/ /

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ___Yes X No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE Conc.	MAXIMUM DAILY DISCHARGE Units	AVERAGE DAILY DISCHARGE Conc.	AVERAGE DAILY DISCHARGE Units	Number of Samples	ANALYTICAL METHOD	ML / MDL
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	3.3	mg/l	1.9	mg/l	3	350.1	
CHLORINE (TOTAL RESIDUAL, TRC)	1.2	mg/l	1.1	mg/l	260	4500CLG	
DISSOLVED OXYGEN	7.8	mg/l	5.4	mg/l	260	Standard 421F	
TOTAL KJELDAHL NITROGEN (TKN)	3.8	mg/l	2.1	mg/l	3	351.2	
NITRATE PLUS NITRITE NITROGEN	6.4	mg/l	6.4	mg/l	3	353.2	
OIL and GREASE	BDL	mg/l	BDL	mg/l	3	1664A	
PHOSPHORUS (Total)	3.9	mg/l	2.8	mg/l	3	365.1	
TOTAL DISSOLVED SOLIDS (TDS)	200	mg/l	193	mg/l	3	2540C	
OTHER TOTAL NITROGEN	7.0	mg/l	4.3	mg/l	3	CALC	

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

X Basic Application Information packet

Supplemental Application Information packet:

_____ Part D (Expanded Effluent Testing Data)

_____ Part E (Toxicity Testing: Biomonitoring Data)

_____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

_____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: CECIL F. ARP, JR. MAYOR

Signature: Cecil F. Arp, Jr.

Telephone number: 423-496-5141

Date signed: DECEMBER 17, 2010

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO: